



DEPARTMENT OF COMMERCE, LABOR & ENVIRONMENTAL RESOURCES  
DIVISION OF ENVIRONMENTAL PROTECTION

1558 Washington Street, East  
Charleston, WV 25311-2599

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Governor  
John M. Ranson  
Cabinet Secretary

David C. Callaghan  
Director  
Ann A. Spaner  
Deputy Director

OFFICE OF AIR QUALITY

PERMIT TO CONSTRUCT, MODIFY, OR RELOCATE  
STATIONARY SOURCES OF AIR POLLUTANTS

PERMIT NO.: R13-1503A      DATE: September 10, 1992  
REVISED: April 5, 1993

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW (\$16-20) AND ADMINISTRATIVE REGULATIONS PROMULGATED THEREUNDER, THE FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT THE SUBJECT FACILITY IN ACCORDANCE WITH THIS PERMIT.

Name of Permittee: Environmental Protection Services  
Mailing Address: Post Office Box 710  
Wheeling, WV 26003  
Nearest City or Town: Wheeling  
County: Ohio  
Directions to Exact Location: At Wheeling Industrial Park southwest of Peninsula Street.  
Type of Facility or Modification: Modification of Hi-Temp Tech Corporation Model HPFA 9000 Car Bottom Recovery Furnace and Afterburner to fire dielectric oil fuel.

## SPECIFIC REQUIREMENTS

(A) IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS THIS PERMIT IS LIMITED AS FOLLOWS:

(1) The permitted source is to be a transformer and metal salvage recovery furnace (incinerator) with a maximum combustible and non-combustible charging rate of 16,000 pounds per three hour charging cycle (800 pounds per three hour charging cycle combustibles) with three (3) primary burners with a total of 4 million Btu per hour minimum heat input and four (4) secondary chamber (afterburner) burners each with a rated 4 million Btu/hr minimum heat input. Such burners shall fire only natural gas except that two (2) burners of the afterburner of the permitted unit, with a total rated capacity of 8 million BTU/hr, may be fired with dielectric oil.

(2) Dielectric oil shall be introduced to the unit only through the designated burners of the afterburner and shall not be burned in the afterburner of the permitted unit unless the afterburner chamber is operating at a temperature of at least 2050°F. Only mineral oil dielectric fluid containing less than 50 ppm PCB shall be burned in the afterburner of permitted unit.

(3) Only natural gas shall be utilized as fuel in primary chamber of permitted unit.

(4) The afterburner serving the recovery furnace shall be operated in accordance with the following performance specifications during all periods of furnace operation:

Minimum combustion gas temperature	2200°F (±212°F)
Minimum oxygen content of exiting gas	3% O <sub>2</sub>
Minimum gas/particle retention time	2 seconds
Minimum combustion efficiency	99.9%

(5) Instruments shall be installed, calibrated and maintained to continuously measure and record the following:

- a) Combustion gas temperature within the secondary chamber.
- b) Oxygen, carbon dioxide, and carbon monoxide in flue gases exiting secondary chamber prior to introduction of any dilution gases.

(6) The permitted source shall not exceed at any time, the air pollution limits set forth below:

Particulate Matter	0.08 lb/hr
Oxides of Nitrogen	0.015 lb/hr
Mercury	1.1 (10 <sup>-7</sup> ) lb/hr (less than 0.003 mg/m <sup>3</sup> at inlet to incinerator)

(7) The permittee shall adhere at all times to the following ash removal and handling practices:

- a) A HEPA filtered vacuum(s) shall be used to clean ash from all parts removed from the transformer burn-out chamber, the burn-out chamber, the settling chamber, and the afterburner.
- b) All ash handling and transfer shall occur within the recovery process building and be conducted in a manner that minimizes any particulate emission into the open air.

(B) OTHER REQUIREMENTS

(1) The permitted facility and the permittee shall comply with all applicable provisions of WVAPCC Regulation 6 in addition to the requirements in Part A of this permit.

(2) Only decommissioned transformers and other salvage materials that have been drained of all dielectric oils and fluids and are not regulated under 40 CFR 761 may be incinerated in the permitted furnace. Each transformer or other piece of electrical equipment to be incinerated must be tested and certified in accordance with 40 CFR 761 to have contained oil with less than 500 ppm PCB prior to receipt and incineration. This permit does not authorize the incineration of any other materials and does not allow the incineration of polyvinyl chloride and teflon.

(3) TESTING REQUIREMENTS FOR ELECTRICAL EQUIPMENT TO BE INCINERATED

(a) Equipment to be incinerated falls within three general categories:

Category 1 - Equipment drained of dielectric oil which has been batch or individually tested and is certified to be less than 500 ppm PCBs,

Category 2 - Equipment which has not been drained of oil but has been individually or batch tested and is certified to contain either less than 500 ppm or less than 50 ppm, and

Category 3 - Equipment that has not been drained of dielectric oil and has not been tested but under the assumption provision of Part 761 is stated to contain 50 - 499 ppm PCBs.

As used above "certified" shall mean that permittee possesses a "certification" as defined in 40 CFR 761.3 -"a

written statement regarding a specific fact or representation that contains the following language:

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the person who, acting under my direct instructions, made the verification that this information is true, accurate and complete."

(b) Testing to determine PCB content shall be conducted prior to incineration of transformers or other electrical equipment as follows:

(1) for units in category (1) above:

a) a proportional sample of the residual oil in each unit shall be taken and collected in a common container to form a composite sample for the batch,

b) a dexsil screening test is conducted, and

c) the remaining composite sample is then analyzed by Gas Chromatography to accurately determine PCB content.

(2) for units in categories (2) and (3) above:

a) a proportional sample of the oil shall be taken from each unit and collected into a common container to form a composite sample for the batch and

b) the composite sample is then analyzed by Gas Chromatography to accurately determine PCB content.

In the event that a batch fails ( $\geq 500$  ppm) the units of that batch may be individually tested to identify and exclude the unit containing greater than 500 ppm.

Note that all sampling and testing shall be conducted in conformance with 40 CFR 761.60(g) and ASTM D-923-86.

Oil drained from units in categories (2) and (3) above which has been tested and confirmed to contain less than 50 ppm PCBs may be transferred to storage and burned in accordance with this

permit. Burning of oil containing ≥250 ppm PCBs is not permitted in this unit.

(4) The recovery furnace shall not be operated at any time without the instruments required by Paragraph A(5) in service and functioning.

(5) The permittee shall maintain and provide to the WVAPCC Director or his authorized representative upon request the following:

- a) All records, manifests, and bills of lading concerning all transformers and PCB contaminated electrical equipment received, verifying and certifying that these transformers have been tested and are not regulated by 40 CFR 761.
- b) All strip charts, printouts or other records from the continuously recording instrumentation required under Paragraph A(5) of this permit. Furnace operating logs and instrument operating records must clearly show that the furnace did not operate during instrument down time.
- c) All operating logs and records relative to the operation and maintenance of the permitted facilities and associated instrumentation. Such records would include calibration records for the process instrumentation.
- d) All sampling, analysis reports, and certifications for all containers of dielectric oil received for use as fuel.
- e) All records required under this permit shall be retained for at least five (5) years.

(6) The afterburner temperature recorder shall record both time and temperature; and the time of primary chamber burner ignition or light-off for all furnace charges shall be recorded on the afterburner temperature charts or printouts (or logged and attached to the afterburner temperature records).

(7) The permittee shall submit a monthly report to the Chief, Office of Air Quality containing the following:

- a) total number of hours and days of operation of the furnace,
- b) total gallons of dielectric oil burned,
- c) dates and times of all periods that the instruments required under Paragraph A(5) are out of service,

- d) dates and time of all periods that the unit is not meeting minimum temperature or oxygen requirements of Paragraph A(4), and
- e) dates and hours of operation of gas regulator mercury vapor recovery process and number of regulators processed
- f) A summary of the results of all composite analyses determined under the test requirements of Provision B (3) above. The report shall be certified by the facility owner or plant manager to be accurate and true and shall also certify that the tests and analyses procedures of Provision B (3) were conducted upon all equipment and dielectric oil received.

(8) Within one hundred twenty (120) days of receipt of this revised permit the permittee shall submit to the Chief the results of a stack test(s) conducted to determine the emission rates of particulate matter, oxides of nitrogen, polychlorinated biphenyls, total dioxins, total furans and mercury. Such test shall comply with General Provision (4) of this permit with respect to notice and test protocol approval.

#### GENERAL REQUIREMENTS

(1) In accordance with 45 CSR 22 - "Air Quality Management Fee Program", the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate. Such Certificate to Operate shall be renewed annually, shall be maintained on the premises for which the Certificate has been issued, and shall be made immediately available for inspection by the Chief of Air Quality or his duly authorized representative.

(2) Possession of this permit does not relieve any person of the responsibility of complying with any and all applicable rules or regulations of the Commission or any other governmental agency.


(3) The permitted facility must be constructed and operated in accordance with information filed in Permit Applications No. 1264 and R13-1503, issued by the Office of Air Quality of the Division of Environmental Protection. The Chief may cancel or suspend a permit if the plans and specifications upon which the approval was based are not adhered to.

(4) At such reasonable time(s) as the Chief may designate, the permittee shall conduct or have conducted stack tests to determine compliance with the emission limitations established in the permit application, applicable WVAPCC regulations, and to otherwise establish air pollutant emission rates. Tests shall be

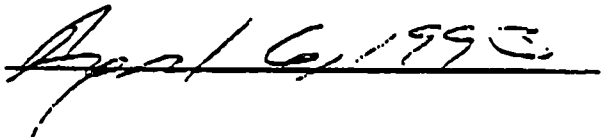
conducted in such a manner as the Chief may specify or approve and must be filed in a manner acceptable to the Chief. The Chief, or his duly authorized representative, may at his option witness or conduct such stack test. Should the Chief exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Chief may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with general accepted good safety practices. For any tests to be conducted by the permittee, a test protocol must be submitted to the Office of Air Quality by the permittee at least thirty (30) days prior to the test and must be approved by the Chief. The Chief must be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.

(5) THIS PERMIT IS NON-TRANSFERABLE.

ISSUED BY:

  
G. DALE FARLEY  
CHIEF

DATE:

  
April 6, 1993



West Virginia Department of  
Commerce, Labor & Environmental Resources  
Air Pollution Control Commission

1558 Washington Street, East  
Charleston, West Virginia 25311

Telephone: (304) 348-4022  
or (304) 348-3286

PERMIT TO CONSTRUCT, MODIFY, OR RELOCATE  
STATIONARY SOURCES OF AIR POLLUTANTS

PERMIT NO.: R13-1264

DATE: February 19, 1991

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW  
(\$16-20) AND ADMINISTRATIVE REGULATIONS PROMULGATED THEREUNDER, THE  
FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT THE SUBJECT FACILITY  
IN ACCORDANCE WITH THIS PERMIT.

Name of Permittee: Environmental Protection Services

Mailing Address: Post Office Box 710  
Wheeling, WV 26003

Nearest City  
or Town: Wheeling

County: Ohio

Directions to  
Exact Location: At Wheeling Industrial Park southwest of  
Peninsula Street.

Type of Facility  
or Modification: Hi-Temp Tech Corporation Model HPFA 9000 Car  
Bottom Recovery Furnace (16,000 pound maximum  
gross charge) and Afterburner.

NON-CONFIDENTIAL

## SPECIFIC REQUIREMENTS

(A) IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS THIS PERMIT IS LIMITED AS FOLLOWS:

(1) The permitted source is to be a transformer and metal salvage recovery furnace (incinerator) with a maximum combustible and non-combustible charging rate of 16,000 pounds per three hour charging cycle (800 pounds per three hour charging cycle combustibles) with three (3) primary burners with a total of 4 million Btu per hour minimum heat input and four (4) secondary chamber (afterburner) burners with a total of 8 million Btu/hr minimum heat input.

(2) The afterburner serving the recovery furnace shall be operated in accordance with the following performance specifications during all periods of furnace operation:

Minimum combustion gas temperature	2200°F
Minimum oxygen content of exiting gas	3% O <sub>2</sub>
Minimum gas/particle retention time	2 seconds
Minimum combustion efficiency	99.9%

(3) Instruments shall be installed, calibrated and maintained to continuously measure and record the following:

- a) Combustion gas temperature within the secondary chamber.
- b) Oxygen, carbon dioxide, and carbon monoxide in flue gases exiting secondary chamber prior to introduction of any dilution gases.

The recovery furnace shall not be operated at any time without these instruments in service and functioning properly.

(4) The permitted source shall not exceed at any time, the air pollution limits set forth below:

Particulate Matter	0.8 lb/hr
Oxides of Nitrogen	0.015 lb/hr

(5) The permittee shall adhere at all times to the following ash removal and handling practices:

- a) A HEPA filtered vacuum(s) shall be used to clean ash from all parts removed from the transformer burn-out chamber, the burn-out chamber, the settling chamber, and the afterburner.
- b) All ash handling and transfer shall occur within the recovery process building and be conducted in a manner that minimizes any particulate emission into the open air.

NON-CONFIDENTIAL

(6) Only decommissioned transformers and other salvage materials that have been drained of all dielectric oils and fluids may be incinerated. All incinerated materials must be tested and certified in accordance with 40 CFR 761 to have contained oil with less than 500 ppm PCB prior to receipt and incineration. This permit does not authorize the incineration of any other materials and does not allow the incineration of polyvinyl chloride and teflon.

(B) OTHER REQUIREMENTS

(1) The permitted facility and the permittee shall comply with all applicable provisions of WVAPCC Regulation 6 in addition to these requirements in Part A of this permit.

(2) The permittee shall maintain and provide to the WVAPCC Director or his authorized representative upon request the following:

- a) All records, manifests, and bill(s) of lading concerning all transformers received verifying and certifying that these transformers have been tested in accordance with 60 CFR 761.
- b) All strip charts, printouts or other records from the continuously recording instrumentation required under Paragraph A(3) of this permit. Furnace operating logs and instrument operating records must clearly show that the furnace did not operate during instrument down time.
- c) All operating logs and records relative to the operation and maintenance of the permitted facilities and associated instrumentation. Such records would include calibration records for the process instrumentation.
- d) All records required under this permit shall be retained for at least five (5) years.

(3) The afterburner temperature recorder shall record both time and temperature; and the time of primary chamber burner ignition or light-off for all furnace charges shall be recorded on the afterburner temperature charts or printouts (or logged and attached to the afterburner temperature records).

GENERAL REQUIREMENTS

(1) Possession of this permit does not relieve any person of the responsibility of complying with any and all applicable rules or regulations of the Commission or any other governmental agency.

(2) The permitted facility must be constructed and operated in accordance with information filed in WVAPCC Permit Application No. 1264 and with "STANDARD OPERATING PROCEDURES FOR THERMAL REDUCTION CHAMBER" attached hereto and made a part hereof. The Director may cancel or suspend a permit if the plans and specifications upon which the approval was based are not adhered to.

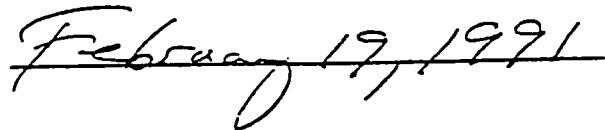
(3) At such reasonable time(s) as the Director may designate, the permittee shall conduct or have conducted stack tests to determine compliance with the emission limitations established in the permit application, applicable WVAPCC regulations, and to otherwise establish air pollutant emission rates. Tests shall be conducted in such a manner as the Director may specify or approve and must be filed in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack test. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with general accepted good safety practices. For any tests to be conducted by the permittee, a test protocol must be submitted to the WVAPCC by the permittee at least thirty (30) days prior to the test and must be approved by the Director. The Director must be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.

(4) THIS PERMIT IS NON-TRANSFERABLE.

ISSUED BY:

  
G. DALE FARLEY  
DIRECTOR

DATE:

  
February 17, 1991